### **GENERAL INFORMATION ABOUT THE KVK**

### 1.1. Name and address of KVK with phone, fax and e-mail

KVK Address	Telephone		E mail	Mah Address	
NVN Address	Office	Fax	E IIIdii	Web Address	
ICAR- KRISHI VIGYAN KENDRA					
	08274-	08274-			
Gonikoppal-571213, Kodagu	247274	247274	iihrkvkgk@gmail.com	-	
District Karnataka					

### 1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Web Address	
Audress	Office	Fax	c maii	web Address	
ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH Hessaraghatta Lake Post Bengaluru-560 089	080 - 28466420/21/22	080 - 28466290	iihr@ernet.in	www.iihr.res.in	

### 1.3. Name of the Programme Coordinator with phone & mobile No

Nama	Telephone / Contact			
Name	Residence	Mobile	Email	
Dr.Saju George	-	9945035707	Saju_74@iihr.ernet.in	

1.4. Year of sanction: 1976

# 1.5. Staff Position (as 31st March 2017)

				If Permanent, F	Please indicate		If Temporary, pl.
SI. No.	Sanctioned post	Name of the incumbent	Discipline	Current Pay Band	Current Grade Pay	Date of joining	indicate the consolidated amount paid
2.1	Programme Coordinator	Dr.Saju George	Agril. Extension	37400-67000	40240	04.05.2014	-
2.2	Subject Matter Specialist	K. A. Devaiah	Horticulture	-	105600	30.11.1993	-
2.3	Subject Matter Specialist	B. Prabhakara	Horticulture	-	74000	03.04.2007	-
2.4	Subject Matter Specialist	Veerendra Kumar K.V	Plant Protection	-	71800	02.12.2009	-
2.5	Subject Matter Specialist	Dr. Suresh S.C	Livestock	-	71100	09.02.2011	_
2.6	Subject Matter Specialist	-	-	-	-	-	-
2.7	Subject Matter Specialist	-	-	-	-	-	-
2.8	Programme Assistant	_	-	-	-	-	-
2.9	Computer Programmer	M .K .Padmavathy	-	-	67000	21.01.1983	-
2.10	Farm Manager	_	-	-	-	_	_
2.11	Accountant/Superintendent	P. C. Ponnamma	-	-	56900	_	-
2.12	Stenographer	-	-	-	-	18.04.2011	-
2.13	Driver 1	Prasad	-	-	45400	11.04.2016	-
2.14	Driver 2	-	-	-	-	-	-
2.15	Supporting staff 1	B. N.Janaki	-	-	32000	25.03.1985	-
2.16	Supporting staff 2	=	-	-	-	-	-

# 1.6. Total land with KVK (in ha)

### : 17.5 ha

Sl. No.	Item	Area (ha)
1	Under Buildings	6.1
2.	Demonstration units (Piggery, Fodder block, Goatary, poultry, poly house, nursery)	3.5
3.	Crops (Coffee + Black Pepper, Arecanut, Banana, Coorg Mandarin, Sapota, Guava and minor fruits )	7.9

# 1.7. Infrastructural Development:

# A) Buildings

			Stage						
	Name of	Source	Complete			Incomplete			
SI.N	huilding	building Of	of funding	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction.
1.	Administrative Building	ICAR	2001	500		-	_	-	
2.	Farmers Hostel	ICAR	2001	300	77,34,081	-	-	-	
3.	Staff Quarters	ICAR			Nil				
4.	Demonstration Units	ICAR	1995	160	15,25,588	-	-	-	
5	Fencing				Nil	±.			
6	Rain Water harvesting system	Nil							
7	Threshing floor	Nil							
8	Farm godown		Nil						

# B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Mahindra hard top)	1998		377804	Not in good condition
Tractor (M. Ferguson)	2004			Good
Bike (Bajaj-CT-100)	2004		25477	Good
Power Tiller	2011			Good
Hero Honda Splendor Plus	2009		14883	Good

# B) Equipments & AV aids

Name of the Equipment	Year of Purchase	Cost (Rs.)	Present Status
PA System	2002	11,408	Good
Aqua guard(2)	2003	1500	Good
Electronic weighing Balance	2004	15550	Good
Photocopier (Toshiba e studio 160)	2004	157.899	Good
Computer with accessories	2005	74,640	Good
Back pack sprayer	2005	9050	Good
Tiller mounted power sprayer	2005	23,750	Good
Mechanical weeder	2005	30,000	Good
HP Scanner 3770	2005	7650	Good
Stack feeder bi pass	2005	5122	Good
Computer with accessories	2005	51,683	Good
Solar water heater	2006	77,036	Good
Balance	2006	9000	Good
Display boards	2006	9976	Good
Citizen balance	2006	68850	Good
Computer with accessories	2007	59,808	Good
Microwave oven	2007	13,850	Good
LCD projector	2011	1,00,000	Good
Power sprayer	2011	36,000	Good
Generator (5 KV)	2011	1,06,000	Good
Computer with accessories	2011	49,120	Good
Mechanical weeder	2011	24,000	Good
Camera SX 3015 (Canon)	2011	27680	Good
Disc plough & Disc harrow	2011	82,950	Good
Tr. mounted weed slasher	2011	85,195	Good
Extendable Al. ladder	2011	17,556	Good
BOD	2015	80,000	New
Solar energy int. autoclave	2015	2.49,000	New
Grain boiler	2015		New
Bag filler	2015		New
Boiled grain and chalk powder mixer	2015		New
Digital balance	2015	9,500	New
Laminar Air flow	2015	1,17,000	New

1.8. Details SAC meeting conducted in 2016-17: (Date of Last SAC conducted 07.12.2016)

Salient Recommendations	Action taken
<ul> <li>Custom hiring centre, servicing and training on farm machinery and their maintenance</li> </ul>	Project will be submitted for funding from NABARD
Training on dehydration techniques and its market linkage	<ul> <li>Organized scientists- entrepreneur and farmer interface meet at KVK in the month of Dec 2016</li> </ul>
<ul> <li>Documentation of KVK Interventions through success stories and its video coverage</li> </ul>	Will be taken up
<ul> <li>Establishment of demonstration unit of shade net / poly house cultivation of yard long bean and also in selected five farmer's field.</li> </ul>	Will be taken up
<ul> <li>Organize exposure visits by the KVK for the district bank managers and farmers</li> </ul>	Three Inter District level exposure visit planned and will be conducted within the financial year in collaboration with the NABARD
Production and availability of bio agents and bio pesticides	<ul> <li>AMC produced (10 tons) during the financial year and new project submitted for Trichoderma production under NHM</li> </ul>
Establish composting demonstration unit at KVK farm	<ul> <li>Composting of coffee husk and banana waste started at KVK Farm in collaboration with the IIHR, Bengaluru</li> </ul>
<ul> <li>Organize Entrepreneur meet to cater to the marketing support and their linkage.</li> </ul>	Initiated a FPO at KVK under the technical support of NABARD
Conduct more no training and animal health camps and radio talks	<ul> <li>Seven off campus and two on campus training programme conducted. Also organized 12 animal vaccination and health camps in collaboration with the Dept. of AH &amp; VS</li> </ul>
<ul> <li>Demonstration on poly mulch, drip and fertigation method of selected vegetable cultivation at KVK Farm</li> </ul>	Demonstration is laid out at KVK Farm comprising Tomato, Chilli, French beans, Brinjal, Yard long bean etc.
Establishment of new fodder varieties at KVK farm	<ul> <li>Included Fodder grass DHN-6 and COFS-5 at KVK Fodder bank during the period</li> </ul>
Production of mushroom fruit bags and their trainings	Procured required materials, production and training programme will be taken up under EDP

### **PART II - DETAILS OF DISTRICT**

### 2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Coffee + Pepper + Coorg Mandarin
2	Coffee + Pepper + Cardamom
3	Paddy, Ginger, Banana, Vegetables in low lands
4	Coffee + Pepper + Arecanut
5	Horticulture + Animal Husbandry

### 2.2 Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

S. No	Agro-climatic Zone	Characteristics
1	Sub tropical humid zone	Mountainous with altitude of 2400 feet above MSL
-	Jub tropicarnama zone	Mean Annual rainfall- 2800 mm

S. No	Agro ecological situation	Characteristics
	Major intercrops in multi tier cropping	Misty climate with clouds with less
1	system are Coffee, Pepper, Cardamom,	relative humidity in South Coorg
_	Coorg mandarin and Arecanut. Paddy and	area and less misty, semi malnad
	Ginger are the crops of low lying areas.	climate in North Coorg.

### 2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Sandy loam soils	Acidic, low to medium clay content	99560
2	Red loam soils	With good humus content	123965
	.1	Total	223525

### 2.4. Area, Production and Productivity of major crops cultivated in the district

S. No	Crop	Area (ha)	Production (tons)	Productivity (kg/ha)
1	Coffee	104730	124100	1184
2	Pepper	8880	39385	448
3	Cardamom	9043	1164	130
4	Coorg Mandarin	943	23575	25000
5	Banana	1541	9973	6472
6	Arecanut	2994	4188	1413
7	Paddy	35362	127116	3784

### 2.5. Weather data for the year 2016-17

D.4 + l-	Rainfall (mm)	Temperat	ure <sup>0</sup> C	Relative
Month	,	Maximum	Minimum	Humidity (%)
April	25.25	34	22	65
May	123.0	32	22	60
June	354.75	30	19	58
July	265.50	30	20	68
August	160.25	26	21	72
September	65.75	26	19	68
October	33.75	25	18	73
November	00	25	18	81
December	61.75	25	17	82
January	60.00	26	18	81
February	00	27	20	72
March	55.00	32	21	68
Total	1205 mm			

# 2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
Crossbred	116515	-	-
Indigenous		-	<del>-</del>
Buffalo	31616	-	_
Sheep			
Crossbred	416	-	-
Indigenous		-	-
Goats	4472	-	-
Pigs	24748	-	-
Rabbits			
Poultry			
Hens	269826	-	-
Desi		-	-
Improved		-	_
Ducks	-	-	-
Turkey and others	-	-	_
Category	Area	Production	Productivity
Fish	-	-	-
Marine	-	-	-
Inland	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

<sup>\*</sup> District profile has been **Updated** for 2016-17 Yes

# 2.8 Details of Operational area / Villages

SI. No.	Taluk	Name of the block	Name of the village	How long the village is covered under operational area of the KVK	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Madikeri	Bhagamandala	<ul><li>Cherambane</li><li>Bhagamandala</li></ul>	2013-17	<ul> <li>Coffee,Pepper</li> <li>Arecanut,Ginger</li> <li>Anthurium,</li> <li>Cardamom</li> <li>Paddy,Vegetables</li> <li>Piggery</li> </ul>	<ul> <li>Poor yield in Paddy and Arecanut</li> <li>Berry borer in coffee,</li> <li>Wilt in Pepper</li> <li>Lack of knowledge on value addition</li> <li>Shoot borer problem in Ginger</li> </ul>	<ul> <li>High Yielding varieties of Paddy</li> <li>Integrated nutrient mgmt.</li> <li>IPDM in Horticultural crops</li> <li>Value addition in fruits and vegetables</li> </ul>
2	Virajpet	• Ponnampet	<ul><li>Aruvathoklu</li><li>Balale</li><li>Nalluru</li></ul>	2013-17	<ul><li>Coffee,Pepper</li><li>Arecanut,Ginger</li><li>Banana, Paddy</li><li>Piggery.Poultry</li><li>Value addition</li></ul>	<ul> <li>Low yield in Paddy</li> <li>Poor yield in Banana</li> <li>Berry borer in coffee</li> <li>Wilt in Pepper</li> <li>Lack of knowledge on value addition</li> <li>Poor quality pork production</li> </ul>	<ul> <li>Integrated nutrient management in Pepper and Paddy</li> <li>IDM in Pepper</li> <li>Value addition in fruits and vegetables</li> <li>Upgradation of local Pigs</li> </ul>
3	Somwarpet	<ul> <li>Kushalnagar</li> </ul>	<ul><li>Torenuru</li><li>Chikkaluvara</li><li>Shirangala</li></ul>	2013-17	<ul> <li>Coffee, Pepper</li> <li>Maize, Ginger</li> <li>Cardamom,</li> <li>Vegetables, Value addition</li> </ul>	<ul> <li>Berry borer in coffee</li> <li>Low yield and Wilt in Pepper</li> <li>White stem borer in Coffee</li> <li>Lack of knowledge on value addition</li> <li>Poor nutrient status in paddy</li> </ul>	<ul> <li>Introduction of HYV of Chilly</li> <li>IPM in Chilly</li> <li>Value addition in fruits and vegetables</li> <li>INM in Vegetables</li> </ul>

### 2.9 Priority thrust areas

Sl. No	Thrust areas
1	Promotion of cost effective and market led crop production system
2	Integrated Nutrient Management in agri. and horticultural crops
3	Integrated Crop Management in Horticultural crops
4	<ul> <li>Bio Intensive Pest and Disease management in agri. and horticultural crops</li> </ul>
5	Introduction of High yielding varieties and hybrids
6	<ul> <li>Scientific management for enhancement of productivity and income from Piggery and dairy units</li> </ul>

# PART III - TECHNICAL ACHIEVEMENTS 1781

# 3.A. Details of target and achievements of mandatory activities

	0	FT		FLD				
		1		2				
Num	Number of OFTs N		Number of farmers		Number of FLDs Number of fari		er of farmers	
Targets	Achievement	Targets	Achievement	Targets Achievement		Targets	Achievement	
04	04	20	20	09 09		89	89	

	Trai	ning		Extension Activities					
3				4					
Numbe	er of Courses	Number	of Participants	Numbe	er of activities	Number of participant			
Targets	Achievement	Targets Achievement		Targets Achievemer		Targets Achievemen			
60 85		2000 2408		1500 1781		5000 5856			

Seed Pro	duction (Qtl.)	Planting m	naterial (Nos.)	
	5 6			
Target	Achievement	Target	Achievement	
-	-	30000	35000	

Livest	ock (No.)	Bio-products (Kg)				
	7	8				
Target	Achievement	Target	Achievement			
50	72	6000	7417			

### 3.B1. Abstract of interventions undertaken based on thrust areas identified for the district as given in SI.No.2.7

							Intervention	S						
S. No	Thrust area	Crop/ Enterprise	Identified Problem	Title of OFT if any	Title of FLD if any	Number of Training	Number of Training	Number of Training (extension	Extension activities	Supply of seeds	Supply of planting materials	Supply of livestock	Supp bio pro	
						(farmers)	(Youths)	personnel)	(No.)	(Qtl.)	(No.)	(No.)	No.	Kg
1	Integrated Disease Management	Black Pepper	Higher incidence of Foot rot disease and spike shedding	Assessment of foot rot disease management in Black pepper	-	3	-	-	2	-	-	-	-	350 kg
2	Varietal	Vegetables	Low yield		Demonstration of high yielding Chilli hybrid Arka Kyathi  Demonstration of High yielding French bean var. Arka Sharath Introduction of high yielding									
2	introduction	vegetables	Low yield	-	IIHR Yard Long bean variety <i>Arka Mangala</i> High Yielding cowpea variety									
		Black Pepper	Yellowing, spike shedding	-	Arka Garima in paddy fallows Integrated Crop Management in Black Pepper									
3	IPDM	Paddy	Blast disease	-	Demonstration of High Yielding and blast resistant Paddy var. KPR-1									
		Bitter gourd	Wilt and fruit fly problem	-	IPM in cucurbitaceous Vegetables									
4	Varietal	Ginger	High seed rate and low yield	Assessment of Pro tray raised seedlings and its field performance in Ginger	-									
-	introduction	Banana	Low yield	Assessment of planting system in Nendran Banana for higher yield	-									
5	Livestock	Livestock Livestock and fishery	Low milk yield	Assessment of alterative medical approach for treatment of bovine fibropapilloma/Warts and induction of parammunity in Cows	Demonstration of Fodder grass Sampoorna (DHN-6)									
			Low yield and non utilization of farm ponds	-	Composite Fish Culture in IFS plot									

# 3.B2. Details of technology used during reporting period

C N =	Title of Toolers	Source of	C	l	No. of p	rogrammes	conducted
S.No	Title of Technology	technology	Crop/enterprise	OFT	FLD	Training	Others (Specify)
1	2	3	4	5	6	7	8
1	Assessment of Pro tray raised seedlings and its field performance in Ginger	IISR, Calicut	Ginger	1			
2	Assessment of planting system in Nendran Banana for higher yield	NRC- Trichi	Banana	1	_		
3	Assessment of Foot rot disease management in Black Pepper	IIHR,Bengaluru	Black Pepper	1			
4	Assessment of alterative medical approach for treatment of bovine fibropapilloma/Warts and induction of parammunity in Cows.	TANUVAS, Chennai	Dairy	1			
5	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	UAHS Shivamogga	Tomato	-	1		
6	Demonstration of high yielding Chilli hybrid Arka Meghana	IIHR, Bengaluru	Chilli	-	1		
7	Demonstration of High yielding French bean var. Arka Sharath	IIHR, Bengaluru	French bean	-	1		
8	Introduction of high yielding IIHR Yard Long bean variety  Arka Mangala	IIHR, Bengaluru	Paddy	-	1		
9	Integrated Crop Management in Black Pepper	IISR, Calicut	Black Pepper	-	1		
10	High Yielding cowpea variety Arka Garima in paddy fallows	IIHR, Bengaluru	cowpea	-	1		
11	IPM in cucurbitaceous Vegetables	IIHR, Bengaluru	Bitter gourd	-	1		
12	Demonstration of Fodder grass Sampoorna (DHN-6)	UAS Dharwad	Dairy	-	1		
13	Composite Fish Culture in IFS plot	KVAFSU Bidar	Fishery	-	1		

3.B2 contd..

						ſ	lo. of farm	ers covere	d						
	(	OFT			FL	.D			Trai	ning			Others (Ex	t. activity)	
Ge	neral	SC	/ST	General		SC/ST		General		SC,	/ST	Gen	eral	SC/ST	
M	F	M	F	M	F	M	F	M	F	М	F	М	F	М	F
05	00	00	00												
04	00	01	00												
05	00	00	00												
03	02	00	00												
				09	00	01	00								
				10	00	00	00								
				06	02	02	00								
				08	02	00	00								
				11	02	02	00					•			
				06	02	01	01								
				07	03	00	00								
				08	02	00	00								
				04	00	00	00								

### **PART IV - On Farm Trial**

### 4.A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-	-	-	01	-	01	-	-	-	02
Integrated Disease Management	-	-	-		-		-	01	-	01
Total	-	-	-	01	-	01	-	01	-	03

### 4.A3. Abstract on the number of technologies assessed in respect of livestock enterprises:

Thematic areas	Piggery	Dairy	Goatary	Sheep	Buffalos	TOTAL
Disease Management	-	01	-	-	-	01
Total	-	01	-	-	-	01

4.A4. Abstract on the number of technologies refined in respect of livestock enterprises: Nil

### 4.B. Achievements on technologies Assessed and Refined

### 4.B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha (Per trail covering all the Technological Options)
Varietal Evaluation	Ginger	Assessment of Pro tray raised seedlings and its field performance in Ginger	05	05	1.0
Integrated Crop Management	Banana	Assessment of planting system in Nendran Banana for higher yield	05	05	1.0
Integrated Disease Management	Black Pepper	Assessment of Foot rot disease management in Black Pepper	05	05	0.25
Total	03		15	15	2.25

### 4.B.2. Technologies Refined under various Crops: Nil

### 4.B.3. Technologies assessed under Livestock and other enterprises:

Thematic areas	Enterprises	Name of the technology assessed	No. of units	Number of farmers
Disease Management	Dairy	Assessment of alterative medical approach for treatment of bovine fibropapilloma/Warts and induction of parammunity in Cows.	05	05
Total	01		05	05

### 4.B.4. Technologies Refined under Livestock and other enterprises: Nil

### 4.C1. Results of Technologies Assessed

### **Results of On Farm Trial**

1. Assessment of Pro tray raised seedlings and its field performance in Ginger

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the paramete r	Results of assessment	Feedback from the farmer	Any refineme nt needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
			Assessment		Himachal	Yield t/ha	18.62		IISR Varada yields higher than Himachal and performance in		
Gingor	Protected	Use of local varieties	of Pro tray raised	05	IISR Mahima	Yield t/ha	20.50	21 19		_	_
Ginger	irrigation	and Low yield	its field performance in Ginger	05	IISR Varada	Yield t/ha	21.18	21.18	Kodagu soil is good. Varada get slightly higher price in local market.	_	-

#### Contd..

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1: Himachal	-	18.62	t/ha	344460	2.28
Technology option 2: IISR Mahima	IISR, Calicut	20.50	t/ha	406500	2.51
Technology option 3: IISR Varada	IISR, Calicut	21.18	t/ha	428940	2.59

### 2.0 Assessment of planting system in Nendran Banana for high yield

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the paramete r	Results of assessme nt	Feedback from the farmer	Any refinem ent needed	Justificatio n for refinement
1	2	3	4	5	6	7	8	9	10	11	12
		_			1.8x1.8 m (3080 pl/ha)		24.9				
		Low	Assessment of planting		2.0x2.0 m 2500 pl/ha		22.5		The increase in plant		
Banana	Protected irrigation	populati on leading to poor yield	n system in Nendran Banana	05	1.2 X 1.2 X 2.0 m 5200 pl/ha	Yield/ha	39	39.0	population and its yield		
					2.0x 3.0 m Two plants per pit (3332/ha)		26.9		was on par with the with 3332 pl/ha	-	

#### Contd..

Technology Assessed	Source of Technology	Production	unit	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Technology option 1:	FP	24.9	t/ha	173500	1.87
Technology option 2:	KAU, Kerala	22.5	t/ha	175500	2.08
Technology option 3:	KAU, Kerala	39	t/ha	360000	2.60
Technology option 4:	KAU, Kerala	26.9	t/ha	237700	2.43

# 3.0 Assessment of foot rot disease management in Black pepper

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
					<ul> <li>Spraying of Bordeaux</li> <li>Mixture</li> </ul>		2.29		Drenching of Arka		
			Assessment		<ul><li>spraying of Bordeaux mixture</li><li>Drenching of Metalaxyl + Mancozeb</li></ul>		3.34		Microbial Consortium during June,		
Black pepper	Rain fed	Rain fed rot disease management disease in Black line Black   Incidence of foot rot disease management in Black   O5   Mulching with UV stabilized plastic sheet around the base of the plant and soil application of Pseudomonas florescence along with FYM   4.25   4.64	4.64	September and November reduces the yellowing,	-	-					
			pepper		<ul> <li>Drenching of Arka Microbial Consortium during June, September and October and Spraying of Potassium Phosphonate</li> </ul>		4.64		spike shedding and disease incidence		

#### Contd.

Technology Assessed	Source of Technology	Production (Dry yield)	unit	Net Return (Rs.)	BC Ratio
13	14	15	16	17	18
Technology option 1 :	-	2.29	q/ha	66450	2.02
Technology option 2 :	IISR, Calicut	3.34	q/ha	107540	2.41
Technology option 3 :	UAS,Dharwad	4.25	q/ha	164010	3.34
Technology option 4:	IIHR, Bengaluru	4.64	q/ha	183700	3.56

# 4.0 Assessment of alterative medical approach for treatment of bovine fibropapilloma/Warts and induction of parammunity in Cows.

Enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
	Application of Neem oil, aloevera and turmeric paste     Injecting I/M- Inj. Lithium antimony thiomalate tartarate @ 15ml/cow in 48 hrs interval and repeated for 4-6 times + Inj. Meloxicam @ 15ml/cow + Inj. Chlorpheneramine maleate-15 ml/cow + Inj. Chlorpheneramine maleate-15 ml/cow + Inj. Vit.B complex @15ml/cow Mi				aloevera and turmeric paste		2748				
		Milk Yield	2933			Injecting 10ml animal's own blood I/M and					
Dairy	-	Fibropapilloma/Warts resulting in heavy loss	of bovine fibropapilloma/Warts and induction of parammunity in Cows.	05	<ul> <li>Injecting S/C- I. 1.Inj. Thuja 200x solution @1.5 ml diluted with 1.5ml distilled water on day-1,</li> <li>2.Inj. Thuja 200x solution @1.5 ml diluted with 1ml distilled water on day-7,</li> <li>3.Inj. Thuja 200x solution @1.5 ml without dilution on day-21</li> <li>II. Inj. Levamisole-2ml/cowone day prior to treatment injected for 3 weeks. This is to boost parammunity.</li> </ul>	(kg/Lactation)	3246	3246	Alternate treatment is good	10ml blood S/C along with alternate treatment gives best result	

#### Contd.

Technology Assessed	Source of Technology	Production (Milk yield)	Unit	Net Return (Rs.)	BC Ratio
13	14	15	16	17	18
Technology option 1	-	2748	(kg/ Lactation)	17527	1.27
Technology option 2	KVAFSU Bidar	2933	(kg/ Lactation)	26025	1.42
Technology option 3	TANUVAS Chennai	3246	(kg/ Lactation)	38717	1.66

# 4.C2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details

### 1. Assessment of Pro tray raised seedlings and its field performance in Ginger

Title of Technology Assessed	Assessment of Pro tray raised seedlings and its field performance in Ginger
Problem Definition	Use of local varieties and Low yield
Details of technologies selected for assessment	IISR Varada and IISR Mahima
Source of technology	IISR, Calicut
Production system and thematic area	Protected irrigation and varietal trial
Performance of the Technology with performance indicators	Noticed higher yield, less disease incidence and suitable for delayed harvesting.
Feedback, matrix scoring of various technology parameters done through farmer's participation/ other scoring techniques	Group meeting, Field day
Final recommendation for micro level situation	Performed better in yield and dry recovery than the recommended variety Rio de geneiro and Himachal
Constraints identified and feedback for research	Nil
Process of farmers participation and their reaction	Farmer opinion taken through Group meeting, Training, details after the crop completion to come to the final conclusion.

### 1. Assessment of foot rot disease management in Black pepper

Title of Technology Assessed	Assessment of foot rot disease management in Black pepper
Problem Definition	Incidence of foot rot disease leading to death of plants
Details of technologies selected for assessment	Drenching of Arka Microbial Consortium during June, September and October
Source of technology	IIHR, Bengaluru
Production system and thematic area	Rain fed and Disease management
Performance of the Technology with performance indicators	Timely drenching of Arka Microbial Consortium will reduce the disease incidence and spike shedding
Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	Group meeting, Training and Method demonstration
Final recommendation for micro level situation	Timely drenching of Arka Microbial Consortium will reduce the disease incidence and spike shedding
Constraints identified and feedback for research	Nil
Process of farmers participation and their reaction	Farmer opinion taken through Group meeting, Training, details after the crop completion to come to the final conclusion

### 4.D1. Results of Technologies Refined : Nil

### **PART V - FRONTLINE DEMONSTRATIONS**

# 5.A. Summary of FLDs implemented during 2016-17

SI. No.	Category	Farming Situation	Season and	Crop	Variety/ breed	Hybrid	Thematic area	Technology Demonstrated	Area	(ha)	No. dei	•	Reasons for shortfall in achievement	
			Year						Proposed	Actual	SC/ST	Others	Total	
1	Cereals	Rain fed	2016-17 Kharif	Paddy	KPR-1	-	Integrated Disease management	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	4.0	4.0	00	10	10	-
		Protective irrigation	2016-17 Rabi	Chilli	-	Arka Kyathi	Integrated Crop Management	Demonstration of high yielding Chilli hybrid Arka Kyathi	1.0	1.0	00	05	10	
2	Vegetables	Protective irrigation	2016-17 Rabi	French Bean	Arka Sharath	-	Integrated Crop Management	Demonstration of High yielding French bean var. Arka Sharath	1.0	1.0	00	05	10	-
2	regetables	Protective irrigation	2016-17 Rabi	Yard Long Bean	Arka Mangala	-	Integrated Crop Management	Introduction of high yielding IIHR Yard Long bean variety <i>Arka Mangala</i>	1.0	1.0	02	08	10	-
		Protective irrigation	2016-17 Rabi	cowpea	Arka Garima	-	Integrated Crop Management	High Yielding cowpea variety Arka Garima in paddy fallows		0.5	02	08	10	-
			2016-17 Rabi	Bitter gourd	-	-	Integrated Pest Management	IPM in cucurbitaceous Vegetables	0.5	0.5	10	00	10	
3	Spices and condiments	Rain fed	2016-17 Kharif	Black Pepper	-	Panniyur- 1	Integrated Crop Management	Integrated Crop Management in Black Pepper	2.0	2.0	02	13	15	-
4	Dairy	-	2016-17 Kharif	Dairy	CB cows	-	Fodder	Demonstration of Fodder grass Sampoorna (DHN-6)	5 unit	5unit	0	05	05	
5	Fishery	-	2016-17 Kharif	Fishery	-	-	Fishery	Composite Fish Culture in IFS plot	4 unit	4 unit	0	04	04	-

# 5.A. 1. Soil fertility status of FLDs plots during 2016-17

SI.		Farming	Season		Variety/					Status of soil			Previous
No.	Category	Farming Situation	and Year			Hybrid	Hybrid Thematic area		Technology Demonstrated	N	Р	K	crop grown
		Rain fed	2016-17 Kharif	Paddy	KPR-1	-	Integrated management	Disease	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	М	М	L	Paddy
		Protective irrigation	2016-17 Rabi	Chilli	-	Arka Kyathi	Integrated Management	Crop	Demonstration of high yielding Chilli hybrid Arka Kyathi	М	М	М	Paddy
	Cereals	Protective irrigation	2016-17 Rabi	French Bean	Arka Sharath	-	Integrated Management	Crop	Demonstration of High yielding French bean var. Arka Sharath	М	М	М	Paddy
1	Vegetables	Protective irrigation	2016-17 Rabi	Yard Long Bean	Arka Mangala	-	Integrated Management	Crop	Introduction of high yielding IIHR Yard Long bean variety <i>Arka</i> <i>Mangala</i>	Н	М	L	Paddy
		Protective irrigation	2016-17 Rabi	cowpea	Arka Garima	-	Integrated Management	Crop	High Yielding cowpea variety Arka Garima in paddy fallows	Н	М	L	Paddy
		Protective irrigation	2016-17 Rabi	Bitter gourd	-	-	Integrated Management	Pest	IPM in cucurbitaceous Vegetables	Н	М	L	Paddy
2	Spices and condiments	Rain fed	2016-17 Kharif	Black Pepper	-	Panniyur-1	Integrated Management	Crop	Integrated Crop Management in Black Pepper	M	М	L	-
3	Dairy	-	2016- 17 Kharif	Dairy	CB cows -	-	Fodde	r	Demonstration of Fodder grass Sampoorna (DHN-6)	-	-	-	-
4	Fishery	-	2016-17 Kharif	Fishery	-	-	Fishery	/	Composite Fish Culture in IFS plot	-	-	-	-

5.B. Results of Frontline Demonstrations5.B.1. Crops

Crop	Name of the technology	Variety	Hybrid	Farming	No. of	Area		Yield	(t/ha)		%	*Econo	mics of demo	nstration (Rs.	/ha)		*Economics (Rs./h		
Сгор	demonstrated	variety	пурпи	situation	Demo	(ha)		Demo		Check	Increase	Gross	Gross	Net	**	Gross	Gross	Net	**
Paddy	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	KPR-1	-	Rain fed	10	4.0	н 4.91	4.10	4.57	3.24	41.05	39600	74493	34893	1.88	36910	Return 42191	Return 5281	1.14
Chilli	Demonstration of high yielding Chilli hybrid Arka Kyathi	-	Arka Kyathi	Protective irrigation	10	3.0	34.50	31.20	32.85	27.30	20.32	148100	616895	468795	4.16	143800	516895	373075	3.59
French Bean	Demonstration of High yielding French bean var. Arka Sharath	Arka Sharath	-	Protective irrigation	10	1.0	17.50	14.20	17.35	13.15	31.94	98968	357225	258257	3.6	94733	279760	185027	2.95
Yard Long Bean	Introduction of high yielding IIHR Yard Long bean variety Arka Mangala	Arka Mangala	-	Protective irrigation	10	1.0	22.50	17.00	20.90	17.37	20.32	120000	418000	298000	3.48	115000	318400	227400	2.76
cowpea	High Yielding cowpea variety Arka Garima in paddy fallows	Arka Garima	-	Protective irrigation	10	0.5	18.11	16.31	17.31	14.53	19.13	95000	311580	216580	3.27	87500	261540	174040	2.98
Bitter gourd	IPM in cucurbitaceous Vegetables	-	-	Protective irrigation	10	0.5	9.62	7.95	9.75	7.20	35.42	85500	293280	207780	3.43	75500	196560	121060	2.60
Black Pepper	Integrated Crop Management in Black Pepper	-	Panniyur- 1	Rain fed	15	2.0	5.00	4.16	4.63	2.93	58.02	76160	249866	155706	3.28	70160	135366	65206	1.92

# Data on additional parameters other than yield (viz., reduction of percentage in weed/pest/ diseases etc.)

SI.	Technology	Data on other parameters in relation to technology demonstrated							
No.	.com.c.o <sub>6</sub> ,	Parameter with unit	Demo	Check					
1	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	Blast disease (PDI)	8.91	24.87					
2	Integrated Crop Management in Black Pepper	% yellowing	8.99	21.05					
3	IDM in qualifications Vegetables	% wilt disease incidence	6.55	16.22					
3	IPM in cucurbitaceous Vegetables	No. of Fruit flies trap /week	26.30	-					
5	Demonstration of high yielding Chilli hybrid Arka Kyathi	Yield per plant (kg/plant)	2.3	2.1					
6	Demonstration of High yielding French bean var. Arka Sharath	Yield per plant (kg/plant)	1.7	1.3					

Arka Mangala variety well accepted by farmers and it yield more and acceptability by the consumer is also good. Rs.40/kg

### 5.B.2. Livestock and related enterprises

T of	Name of the	_	No.	No.	Fodder yield (t/h)			%	*Economics of demonstration Rs./unit)				*Economics of check (Rs./unit)				
Type of livestock	technology demonstrated	Breed	of Demo	of Units		Demo		Check if	Increase	Gross Cost	Gross Return	Net Return	** BCR	Gross Cost	Gross Return	Net Return	** BCR
					Н	L	Α	any									
Dairy	Demonstration of Fodder grass Sampoorna (DHN-6)	CB cows / DHN-6	09	05	119.00	99.50	114.11	29.11	292.99	70964	142638	71674	2.01	29826	36388	6562	1.22
Fishery	Composite Fish Culture in IFS plot	Catla, Rohu, Mrigal, C.Carp, G.Carp	08	01	6.50	3.40	5.69	2.16	163.43	182372	569000	386628	3.11	114286	216000	101714	1.88

Data on additional parameters other than yield (viz., reduction of percentage diseases, increase in conceiving rate, inter-calving period etc.)

Sl. No.	Tachnology	Data on oth	er parameters in r	elation to technology demonstrated
31. INU.	Technology	Parameter with unit	Demo	Check if any
1	Demonstration of Fodder grass Sampoorna (DHN-6)	Fodder Yield (t/ha)	114.11	29.11

5.B.3. Fisheries: Nil

5.B.4. Other enterprises: Nil

5.B.5. Farm implements and machinery: Nil

# 5.B.6. Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organized	Number of participants	Remarks
1	Field days	05	158	Field day on banana, Black pepper and vegetables
2	Farmers Training	10	332	IPDM in Black pepper, IDM in Banana and Ginger, Disease mgmt. in pigs, Value addition in imp. crops
3	Media coverage	05	-	OFT on pepper, FLD on vegetables and INM in Banana
4	Training for extension functionaries	01	13	Scientists farmers Interface programme on banana, Black pepper and vegetables production technology and mgmt. of pest and diseases
5	Field visits	23	37	Field visits were taken up before and after the implementation of FLD programmes
6	Method demonstration	13	225	Seed treatment in Paddy, Bunch bagging technique in Banana
7	Diagnostic field visit	06	09	FLD on vegetable crops

### PART VI – DEMONSTRATIONS ON CROP HYBRIDS

Demonstration details on crop hybrids : Nil

**PART VII. TRAINING** 

### 7.A.. Training of Farmers and Farm Women including sponsored training programmes (On campus)

	No. of	No. of Participants											
Area of training	Courses		General			SC/ST			<b>Grand Total</b>				
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Horticulture													
Scientific Ginger cultivation	02	55	20	75	15	6	21	70	26	96			
Protected cultivation	01	18	4	22	07	3	10	25	07	32			
Mushroom cultivation	04	70	10	80	10	4	14	80	14	94			
Production tech. of Hort. crops	01	05	07	12	25	8	33	30	15	45			
Nutrition mgmt. in Hort. crops	01	20	12	32	35	13	48	55	25	80			
Marketing of Spice crops	01	20	10	30	10	5	15	30	15	45			
Small farmers dynamics in tech. adoption	01	18	8	26	02	02	04	20	10	30			
Plant protection	00	00	00	00	0	0	0	0	0	0			
Plant protection in Agri/Hort. crops	02	25	20	45	8	6	14	18	06	24			
Livestock	0	0	0	0	0	0	0	0	0	0			
Dairy farming	03	34	125	159	10	32	42	44	157	201			
Home science	00	00	00	00	0	0	0	0	0	0			
Bakery	01	00	18	18	0	02	02	00	20	20			
Fruit Processing& Preservation	07	15	148	163	05	12	17	20	160	180			
TOTAL	24	280	382	662	127	93	220	392	455	847			

# 7.B Training of Farmers and Farm Women including sponsored training programmes (Off campus)

	No. of	No. of Participants										
Area of training	Courses		General			SC/ST			<b>Grand Total</b>			
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Horticulture												
Mushroom cultivation	02	25	48	73	5	12	17	30	60	90		
Anthurium cultivation	01	4	16	20	1	4	5	5	20	25		
Black pepper cultivation	03	90	50	140	20	17	37	110	67	177		
INM in Hort. crops	02	52	24	76	8	4	12	60	28	88		
Vegetable cultivation	03	32	20	52	8	5	13	40	25	65		
Plant protection	00	00	00	00	0	0	0	0	0	0		
Seed Treatment and their importance	01	16	10	26	4	2	6	20	12	32		
Importance of Bio control agents in Plant disease management	02	108	30	138	32	13	45	140	43	183		
IPDM in Paddy	12	230	115	345	50	25	75	280	140	420		
Livestock	00	00	00	00	0	0	0	0	0	0		
Scientific piggery farming	5	60	78	138	15	22	37	75	100	175		
Fodder cultivation	01	8	10	18	2	5	7	10	15	25		
Scientific Goatary Farming	04	15	70	85	05	23	28	40	93	133		
Home science	00	00	00	00	0	0	0	0	0	0		
Bakery	01	6	78	84	02	14	16	8	92	100		
Value addition in Horticultural crops	05	8	164	174	02	20	22	10	184	194		
Incoming generating activities for SHGs	01	2	30	32	0	8	8	2	38	40		
TOTAL	43	656	743	1401	154	174	328	830	917	1747		

### 7.C. Training for Rural Youths including sponsored training programmes (on campus)

Area of training	No. of	No. of Participants									
	Courses		General			SC/ST			<b>Grand Total</b>		
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Mushroom cultivation	1	10	2	12	2	1	3	12	3	15	
Piggery	1	12	3	15	4	1	5	16	4	20	
Value addition in Hort. crops	1	0	18	18	0	2	2	0	20	20	
Nursery mgmt.	1	6	6	12	2	1	3	8	07	15	
TOTAL	4	28	29	57	8	5	13	36	34	70	

### 7.D. Training for Rural Youths including sponsored training programmes (off campus)

	No. of	No. of Participants									
Area of training	Courses	General				SC/ST		Grand Total			
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Oyster Mushroom Cultivation	1	8	1	9	2	1	3	6	2	8	
Scientific Pork Production	1	10	3	13	2	1	3	12	4	16	
Scientific Dairy Farming	1	7	1	8	3	1	4	10	2	12	
Scientific Goatary Farming	1	6	3	9	3	0	3	9	1	10	
TOTAL	4	31	8	39	10	3	13	37	9	46	

### 7.E. Training programmes for Extension Personnel including sponsored training programmes (on campus)

	No. of	No. of Participants									
Area of training	Courses	General			SC/ST			Grand Total			
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Recent advances in controlling FMD in animals	1	60	4	64	18	3	15	78	7	85	
IPDM in Horticultural crops	2	52	22	74	8	8	16	60	30	90	
Advances in Production Technology of Horticultural Technologies	1	20	5	225	4	1	5	24	6	30	
Total	4	132	31	363	30	12	36	162	43	205	

### 7.F. Training programmes for Extension Personnel including sponsored training programmes (off campus): Nil

### 7.G. Sponsored training programmes – Nil

### 7.H. Details of vocational training programmes carried out by KVKs for rural youth

	No. of		No. of Participants									
Area of training	Courses	General			SC/ST			Grand Total				
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Value addition in Horticultural crops	1	10	12	22	3	3	6	13	15	28		
Mushroom cultivation	2	12	8	20	3	2	5	15	10	25		
Total	3	22	20	42	6	5	11	28	25	53		

### PART VIII – EXTENSION ACTIVITIES

Nature of Extension	No. of No. of Participants (General)			No. of Participants SC / ST			No. of extension personnel			
Programme	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Days	05	110	48	158	17	8	25	4	8	12
Krishi Uthsav/Mela	03	450	200	650	75	75	150	25	10	35
Exhibition	04	168	147	215	18	07	25	18	07	25
Film Show	6	26	12	38	8	2	10	20	8	28
Method Demonstrations	8	16	8	24	8	6	14	3	1	4
Group meetings	6	12	6	18	2	4	6	1	1	2
Lectures delivered as RP	45	315	305	620	45	16	61	20	6	26
Newspaper coverage	16	000	0	0	0	0	0	0	0	0
Popular articles	06	0	0	0	0	0	0	0	0	0
Extension Literature	04	0	0	0	0	0	0	0	0	0
Advisory Services	1325	235	148	383	10	8	18	22	12	34
Scientific visit to farmers field	165	142	12	144	7	4	11	49	16	65
Farmers visit to KVK	1115	655	335	990	40	10	50	60	15	75
Diagnostic visits	8	4	2	6	1	1	2	05	3	08
Soil health Campaigns	2	30	15	45	5	6	11	2	1	3
Animal Health Camp	12	125	32	157	18	6	24	16	3	19
Soil test campaigns	01	12	6	18	1	1	2	1	1	2
Expert Farmer Media	3	48	16	64	3	2	5	8	1	9

Total	1781	4083	1893	5856	321	182	503	381	140	526
Agricultural technology week	1	380	185	565	16	6	22	32	12	44
awareness prog.	1	45	25	70	6	3	9	6	2	8
World soil day/Rabi	1	45	2.5	70	c	2	0	c	2	0
Awareness programme(PMFBY)	1	260	130	390	15	6	21	28	12	40
Seed treatment campaign	8	365	95	450	18	6	24	12	6	18
Kisan Mobile Adv. Services	12	650	138	788	0	0	0	8	6	14
Exposure visit	3	80	10	90	3	3	6	3	1	4
TV programmes	2	0	0	0	0	0	0	0	0	0
Radio talks	14	0	0	0	0	0	0	0	0	0
Seminar	1	45	12	57	2	1	3	8	1	9
Media meet	1	10	6	16	0	0	0	2	1	3
World veterinary day	1	0	0	0	3	1	4	28	6	39
Interface										

### PART IX - PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

### 9.A. Production of seeds by the KVKs: Nil

### 9.B. Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Plantation	Coffee	S -274		9000	92660	62
riantation	Arecanut	Theerthalli	-	1500	22485	11
Spices	Black Pepper	-	Panniyur-1	8000	80306	45
		Napier	CO-3	10000	10000	10
Foddo.	Fodder	Napier	Co-4	10000	10000	17
Fodder	Fodder	Napier	NB-21	5000	5000	05
			DHN-6	5000	5000	05

### 9.C. Production of Bio-Products:

SI	Name of the	Name of the production		mount
No	Bio fertilizer	Qty produced (Kg)	Cost of input ( Rs.)	Gross income ( Rs )
1	Arka Microbial Consortium	7417	250000	667530

#### 9.D. Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Goatary	Malabari/Sirohi	10	45,000	06
Piggery	Duroc CB/Yorkshire	62	186000	45

#### PART X – PUBLICATION, SUCCESS STORY, SWTL, TECHNOLOGY WEEK AND DROUGHT MITIGATION

### 10. A. Literature Developed/Published (with full title, author & reference)

(A) KVK News Letter (Date of start, Periodicity, number of copies distributed etc.)

#### 15. Literature developed/published

ltem	Title	Authors name	Number
Research Papers			00
Abstracts	Soil Test Based fertilizer application in Coffee.	Prabhakar, B and Saju George	03

	Management of Foot rot disease in Black pepper.	Veeerendra Kumar, K.V., Saju George., B. T. Rayadu		
Technical reports	Action Plan and Annual report (2016-17)	Dr. Saju George Veerendra kumar K.V. Prabhakara, B.	02	
Technical bulletin	Calendar of operations for important horticultural crops of Kodagu (in Kannada).	Dr. Saju George Veerendra kumar K.V. Prabhakara, B.	500	
Extension	Pradhan Mantri Fasal Bheema Yojana- A Guideline	Dr. Saju George, Veerendrakumar, K.V. Prabhakara, B, Suresh, S.C. and Devaiah, K. A		
Folder	Importance of vaccination in animals	Dr. Saju George , Dr. S. C. Suresh	1500	
	Soil health management for sustainable agriculture	Saju George , Prabhakara, B.		
Extension Pomplet	Calendar of operations for Black Pepper.	Dr. Saju George Veerendrakumar K.V. Prabhakara, B.	1000	
	Single node method of Black pepper nursery production technology. Krishi Mitra Kannada magazine	Veerendrakumar, K.V. Dr. Saju George, Prabhakara, B and Devaiah, K. A.,		
	Management of livestock during summer season	Suresh, S.C and Saju George		
Popular articles	Oyster Mushroom cultivation	Prabhakara, B, Veerendrakumar, K.V. Dr. Saju George	05	
	Scientific Pig rearing	Suresh, S.C and Saju George		
	Role of Bio agents in Plant disease management	Veerendrakumar, K.V. Dr. Saju George, Prabhakara, B and Devaiah, K. A.,		

### 10.B. Details of Electronic Media Produced: Nil

10.C. Success Stories / Case studies, if any (two or three pages write-up on each case with suitable action photographs. The Success Stories / Case Studies need not be restricted to the reporting period).

# Doubling Pepper Farmers Income through Integrated nutrient Management practices in Kodagu District of Karnataka

Coffee and Pepper are the two major commercial crops of the Kodagu district. In recent years pepper has gained lot of attention from farmers due to high market prices. Pepper prices are ruling high at around Rs 650 per kg. Arka Microbial consortia was introduced to pepper farmers during the last 4 years by KVK, Kodagu and the product has seen surge in demand by pepper farmers. It is an organic product which is having N fixing, P and Zn mobilising organisms. In addition it suppresses the growth of disease causing organisms. On an average there are about 50 pepper vines in an acre of coffee based pepper cropping system. Pepper farmers loose about 4 % vines every year due to disease attack. It takes about 6-8 years for new vines to reach full yielding potential. The soils of Kodagu are generally acidic and therefore lime or dolomite has to be applied every 3 years. Farmers apply very less of Farm yard manure and fertiliser usually to pepper vines. The application of timely lime, fertiliser application, 3 times application of Arka Microbial consortia and use of IISR Pepper special (micronutrient mixture) can significantly improve the plant health, reduce the mortality of vines. By following these integrated practices the income of farmers can be doubled in 5 years. The KVK at present is producing about 10 tonnes of Arka Microbial Consortia and supplying to about 276 number of pepper farmers annually. The farmers have given the feedback that wherever the AMC has been used, the mortality is considerably less and the health of vines has improved Through leaf turn to dark green colour, improve the root growth, berry and spike size also increase. These berries fetch more price due to their bulk density which can be exported. So these farmers are seeing an increase of 10-15 % increase in yield every year due to factors such as less spike drop, increased weight of berries and sustainable recovery from yellowing disease. Farmers have reported complete recovery of vines. Due to these factors the income of farmers will be doubled in 5 years compared to farmers who are not following these integrated package. They will be losing about 16 % of the vines due to lack of management practices itself compared to the farmers who are applying AMC. KVK has monitored the healthy development of vines in the fields of Shri Thimmaiah, from Nallur village and Shri Subhash of Aravathoklu village of Virajpet taluk and Shri Major Achappa, Murnad village of Madikeri Taluk of Kodagu district.

#### FIRST ATTEMPT OF VEGETABLE CULTIVATION SHOWED THE WAY OF SUCCESS

Mr. Rajeev, K.I. s/o Lingappa, Cherambane village, Madikeri taluk, Kodagu District was well versed with the cultivation of coffee, black pepper and paddy, honey rearing in his 10.5 acre of coffee based cropping system. Being an responsible person in the joint family and technical background (Diploma in ITI) and diploma in Agriculture, working as facilitator in Bhoochetana programme(Dept. of Agriculture), Coordinator in FPO formation (Dept. of Horticulture), official member of KVK made his mind to think and practice integrated farming system to overcome the problems of unemployment, high labour wages, year round income and recognition in the society.

During the summer 2016, technical support of KVK and his field experience taken up vegetable cultivation in 1 acre of paddy fallow land on rent basis. Applied soil amendment (Agriculture lime) at the rate of 500 kg per acre on soil test basis during first tilth, harrowed and brought the soil to fine tilth.

The seedlings of Bitter gourd, Ridge gourd, Pumpkin, local cucumber, Sambar cucumber were raised in disposable plastic glass to overcome the problem of poor germination, adjust time of planting and selection of the good quality seedling for transplanting in the month of January. Directly sown seeds of Yard long bean (Arka Mangala), Cowpea (Arka Garima) were sown in rows of 4 feet apart in the month of February.

Regular cultural operations like watering, earthing up, staking, pendal erection were undertaken by him and his friend. Krishi Vigyan Kendra, Gonikoppal organized a Field day on 11.04.2017(Tuesday) under the Front line Demonstration (FLD) 2016-17. All technical support right from selection of crop, seed material and field establishment till harvesting were extended from KVK, Gonikoppal for 10 vegetable growers in the Cherambane cluster of Madikeri taluk. Mr. Rajeev, K.L. field organised a field day to showcase the level of adoption of new crop, variety, initial care, micro nutrient foliar nutrition(vegetable special), staking and right time of harvesting of crop. All precautions were taken for good germination, crop stand, pest and disease under the guidance of KVK team.

The freshness, greenness, tenderness, organically grown and good quality of yard long bean fetching him a price of Rs. 30-40 per kg, Bitter gourd Rs. 40 per kg, Ridge gourd Rs. 30 per kg, Sambar cucumber Rs. 20 per kg, local cucumber Rs. 30 per kg, cowpea Rs. 25 per kg in the local and adjoining Kerala market. Mr. Rajeev, K.L. interest in achieve new area of vegetable cultivation and getting first hand knowledge at KVK Farm vegetable block and attending Field day on vegetables at IIHR, Bengaluru fetches him confidence in getting field level knowledge for the success in the first attempt itself. From the first two harvest he earned the expenditure (Rs. 8500) incurred remaining or subsequent harvest fetches his profit not less than one lakh rupees. Selection of right season, market driven crops, variety, own involvement in all cultural operations, regular contact with the KVK team were the success factor.

The fellow farmer, DAESI participants, Department officials and KVK team appreciated his effort and other farmers in his area are requested his knowledge of growing vegetable cultivation aspects for further expansion of area under cultivation in the area.

10.D. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

Field days	Organized 06 Field days involving department officials, neighboring farmers and beneficiaries. Arranged crop cutting experiment, interactions and experience sharing among the farmers and experts. Participated as a resource person in 03 field organized by line departments in the district.
Animal health campaign	Conducted 15 animal welfare campaigns, in all 240 farmers participated Where, 325 cows, 136 buffaloes, 38 sheep/goats and 146 pigs animals vaccinated against FMD in collaboration with the Department of AH & VS.
Soil testing campaign	Conducted 04 soil testing campaigns. A total of 216 farmers participated. 92 samples were collected.
Farmer to Farmer concept	Introduced this concept for piggery, Vermi composting, Azolla cultivation and Goatary in the district.
Strengthening the SHGs	Twenty two trainings in the field of entrepreneurship activities were conducted both at campus and off campus in collaboration with SKDRDP

# 10.E. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs): Nil

#### 10.F. Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women/Rural Youth/In-service personnel through visits and discussion with the department officials
- Group meeting on specific crops and their problems
- Survey of the cropped area during the season and interact with the growers
- Active discussion with the progressive farmers on various crops

#### 10.G. Field activities

i. Number of villages adopted : 03ii. No. of farm families selected : 136iii. No. of survey/PRA conducted : 08

#### 10.H. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Good

1. Year of establishment : March 2007

2. List of equipments purchased with amount:

Sl. No	Name of the Equipment	Qty.	Cost
1	Almirah (soil storage cabinets)	3	23,841
2	Electronic automatic digestion chamber	1	52,118
3	Distillation set	1	99,225
3	Gas connections	2	5500
5	Elico rotator shaker	1	24,480
6	ECTDS analyzer	1	17,442
7	Flame photometer	1	38,000
8	Spectrophotometer	1	40,000
9	Digital pH meter	1	8550
10	Refrigerator with stabilizer	1	22,000
11	Hot air oven	1	11,000
12	Hot plate	1	4000
13	Aluminum partition	1	41,380
14	Chemical balance	1	68,850
15	Sample grinding mill	1	1,17,000
16	Fume cupboard	1	79,976
17	Water distillation still	1	95,625
Total			6,31,987

#### Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	6196	3133	486	156,276

### Details of samples analyzed during the 2016-17

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized
Soil Samples	1123	713	92	1,60,750

#### 10.I. Technology Week celebration during 2016-17: yes

Period of observing Technology Week : 8 days
Total number of farmers visited : 650
Total number of agencies involved : 12

Number of demonstrations visited by the farmers within KVK campus : 12

#### 10. J. Interventions on drought mitigation (if the KVK included in this special programme): Nil

#### **PART XI. IMPACT**

#### 11.A. Impact of KVK activities (Not to be restricted for reporting period).

Transfer of technology from KVK in the farm of OFT/FLD/ trainings over a period of years and its impact in the villages of the district are follows

	No. of participants	% of adoption	Change in income (Rs.)	
Name of specific technology/skill transferred			Before (Rs./Unit)	After (Rs./Unit)
Use of Arka Microbial Consortium in foot rot disease management in Black Pepper	175	78.0	185000	225000
Soil Test based fertilizer application in coffee	750	81.25	250000	315000
Use of Black Pepper special for enhancing growth and development in Black Pepper	430	46.00	150000	165000
Use of fruit fly traps in vegetable cultivation	220	35.00	150000	175000

#### 11.B. Cases of large scale adoption: nil

#### 11.C. Details of impact analysis of KVK activities carried out during the reporting period-nil

#### PART XII - LINKAGES

#### 12.A. Functional linkage with different organizations

Name of organization	Nature of linkage		
Central Horticultural Experiment Station (IIHR), Chettalli	Mushroom spawn, Passion fruit, Bee keeping unit, minor fruit crops		
Cardamom Research Centre, (IISR) Madikeri	Genuine planting material of pepper,		
Department of Horticulture, Govt. of Karnataka, Madikeri	Collaborating in organizing training programmes, field days, new project proposals		
DCC Bank & NABARD	Collaborating in organizing entrepreneurship training programmes		
Coffee Board, Coorg	Pheromone traps for control of berry borer in coffee coffee package of practices and conducted training programmes coffee growing SHGs		
SKDRDP, Kodagu	Conducting Soil testing campaigns and awareness programme, training programme for SHGs, resource persons for the krishimela, krishiuthsava, seminars etc.		
Dept. of Agriculture, Madikeri	ATMA programme, demonstration of proven technologies, trainings, extension activities, resource person for the training programmes, seminars, Krishi uthsava etc.		

# 12.B. List Externally Funded Projects / schemes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
NHM	2016-17	Dept. of Horticulture	Rs.15,00,000
NABARD	2016-17	NABARD	RS.5,00000

#### 12.C. Details of linkage with ATMA

Is ATMA implemented in your district

Yes

If yes, role of KVK in preparation of SREP of the district?

#### Coordination activities between KVK and ATMA during 2016-17 - Nil

#### 12.D. Give details of programmes implemented under National Horticultural Mission:

Name of the unit	Date/ Month of initiation	Funding agency	Amount (Rs.)
Mushroom Spawn Production	2016-17	Dept. of	Pc 15 00 000
Unit	2016-17	Horticulture	Rs.15,00,000

#### 12.E. Nature of linkage with National Fisheries Development Board: Nil

# 12.F. Details of linkage with RKVY: Nil

#### 12. G. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2016	04	3670	69
May 2016	03	4320	23
June2016	07	5660	389
July 2016	04	5230	13
August 2016	03	3670	16
September 2016	05	3670	27
October 2016	03	1256	230
November 2016	02	1987	218
December 2016	03	2250	356
January 2017	03	2250	160
February 2017	02	2250	00
March 2017	02	3225	00
Total	41	39438	1501

#### PART XIII- PERFORMANCE OF INFRASTRUCTURE IN KVK

# 13.A. Performance of demonstration units (other than instructional farm): Nil

#### 13.B. Performance of instructional farm (Crops) including seed production

	Nome of				Details	of producti	on	Am	ount
SI No	Name of the crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of produce	Qty (Kg)	Cost of input ( Rs.)	Gross income ( Rs )
1	Coffee	1987 1994	Jan	1.6	R.S-274 C x R	Cherry	3500	135000	280000
2	Pepper	1993 1994	March April	2.0	Panniyur-1	Dry pepper	2850	145000	1355000
3	Sapota Banana	1993	Oct March	1.0	Cricket ball	Fruit	3000	78000	178882
4	Arecanut	1998	March April	0.4	Theerthalli Mohithnag ar	Matured nut	3865	55000	97000
5	Coconuts	1996	-	0.4	DxT	T. coconut	9880 no.	35000	72160
			Tota	ı				448000	1983042

#### 13.C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,):

SI	Name of the	Details of production	A	mount
No	Bio fertilizer	Qty produced (Kg)	Cost of input ( Rs.)	Gross income ( Rs )
1	Arka Microbial Consortium	7417	250000	667530

# 13.D. Performance of instructional farm (livestock and fisheries production)

SI.	Name	Detail	s of producti	oduction Amount (Rs.)		Amount (Rs.)	
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
1	Goatary	Malabari	Goat kids	10	18000	30000	-
2	Piggery	Duroc CB	Piglet	62	125000	186000	-
	Total			72	143000	216000	-

#### 13.E. Utilization of hostel facilities

Accommodation available (25)

Months	No. of trainees stayed	Trainee days (days stayed)
April 2016	12	03
May 2016	06	01
June2016	11	01
July 2016	00	00
August 2016	12	04
September 2016	16	02
October 2016	24	02
November 2016	00	00
December 2016	00	00
January 2017	15	02
February 2017	56	08
March 2017	25	04
Total	177	27

#### 13.F. Database management: Nil

#### 13.G. Details on Rain Water Harvesting Structure and micro-irrigation system: Nil

# PART XIV - FINANCIAL PERFORMANCE

#### 14.A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	SBI	Madikeri	000876	Principle Scientist & Head CHES, Chettalli	01000050017	571002060	SBIN0000876
With KVK	-	-	-	-	-	-	-

# 14.B. Utilization of KVK funds during the year 2016-17 (Rs. In lakh)

S. No.	Particulars	Sanctioned RE	Expenditure
	Recurring contingencies		
1	Pay and Allowances	82.26	82.20
2	Travelling Allowances	1.50	1.26
		83.76	83.46
1	Cont	ingencies	
Α	Stationery	2.50	2.49
В	POL	1.72	1.68
С	Meals/Refreshment for trainees	0.75	0.74
D	Training material	0.50	0.49
E	Front Line Demonstration	2.26	2.25
F	On Farm Testing's	1.03	1.03
G	Building maintenance	0.80	0.79
	Library	0.10	0.08
	Training of Extension functionaries	0.25	0.25
Н	Extension activities	0.50	0.50
l	FPD innovative e activities	0.30	0.30
	Soil and water testing	1.36	1.36
	IFS	0.30	0.29
	Display boards	0.10	0.10
	TOTAL (A)	12.47	12.35
B. Non-R	ecurring Contingencies		
	Office automation	3.00	2.87
	Furniture and fixture	3.00	3.00
	Repair and renovation	4.00	4.00
	Vehicle	8.00	8.00
	Total (B)	18.00	17.87
	Grand total (A+B)		113.68

# 14.C. Status of revolving fund (Rs. In lakh) for the three years

Year	Expenditure	Income	Net balance
April 2016 – March 2017	Rs.13,38,960	Rs. 36,14,002	Rs. 62,32,738

# 15. Details of HRD activities attended by KVK staff during 2016-17

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.Saju	Programme	Institute foundation celebrations	IIHR, Bengaluru	6 <sup>th</sup> September, 2016
George Coordinator and Head		Horticultural Education: Present Status and Future Prospects	IIHR, Bengaluru	24 <sup>th</sup> September, 2016
Mr.Veerendra Kumar	SMS (Plant Protection)	one day Master trainers training programme on Spices production and protection technologies	Appangala	22.02.2017
Prabhakara B	SMS (Hort.)	one day Master trainers training programme on Spices production and protection technologies	Appangala	22.02.2017
Suresh S.C SMS (Livestock)		Regional Workshop on Skill Development in Agriculture	NAARM, Hyderabad	20 <sup>th</sup> February, 2017
		training programme on SREP	UAS, Bengaluru	08 -11 <sup>th</sup> Aug.2016
	(2.1.00000.1)	training programme on Dairy Farm and Milk Processing plant Management	NDRI, Bengaluru	18 <sup>th</sup> to 24 <sup>th</sup> Sept, 2016.

# **SUMMARY FOR 2016-17**

# **TECHNOLOGY ASSESSMENT**

Thematic areas	Crop	Name of the technology Assessed	No. of trials
Varietal Evaluation	Ginger	Assessment of Pro tray raised seedlings and its field performance in Ginger	05
Integrated Crop Management	Banana	Assessment of planting system in Nendran Banana for higher yield	05
Integrated Disease Management	Black Pepper	Assessment of Foot rot disease management in Black Pepper	05
Disease Management	CB cows	Assessment of alterative medical approach for treatment of bovine fibropapilloma/Warts and induction of parammunity in Cows.	05
	Total		20

# FRONTLINE DEMONSTRATION

Crop	Name of the technology demonstrated	Variety /Hybrids	Farming situation	No. of Demo.	Area (ha)
Cereals	Demonstration of High Yielding and blast resistant Paddy var. KPR-1	KPR-1	Rain fed	10	4.0
	Demonstration of high yielding Chilli hybrid Arka Kyathi	Arka Kyathi	Protective irrigation	10	1.0
Vegetables	Demonstration of High yielding French bean var. Arka Sharath	Arka Sharath	Protective irrigation	10	1.0
.0	Introduction of high yielding IIHR Yard Long bean variety <i>Arka Mangala</i>	Arka Mangala	Protective irrigation	10	1.0
	High Yielding cowpea variety Arka Garima in paddy fallows	Arka Garima	Protective irrigation	10	0.5
Spices and	IPM in cucurbitaceous Vegetables	-	Protective irrigation	10	0.5
condiments	Integrated Crop Management in Black Pepper	Panniyur-1	Rain fed	15	2.0
Fodder	Demonstration of Fodder grass Sampoorna (DHN-6)	CB cows	Protective irrigation	05	5 unit
Fishery	Composite Fish Culture in IFS plot	Fishery	-	04	4 unit

TRAININGS

Training of Farmers and Farm Women including sponsored training programmes (On campus)

	No. of				N	o. of Participaı	nts			
Area of training	Courses		General			SC/ST		Grand Total		
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Horticulture										
Scientific Ginger cultivation	02	55	20	75	15	6	21	70	26	96
Protected cultivation	01	18	4	22	07	3	10	25	07	32
Mushroom cultivation	04	70	10	80	10	4	14	80	14	94
Production tech. of Hort. crops	01	05	7	12	25	8	33	30	15	45
Nutrition mgmt. in Hort. crops	01	20	12	32	35	13	48	55	25	80
Marketing of Spice crops	01	20	10	30	10	5	15	30	15	45
Small farmers dynamics in tech. adoption	01	18	8	26	02	02	04	20	10	30
Plant protection	00	00	00	00	0	0	0	0	0	0
Plant protection in Agri/Hort. crops	02	25	20	45	8	6	14	18	06	24
Livestock	0	0	0	0	0	0	0	0	0	0
Dairy farming	03	34	125	159	10	32	42	44	157	201
Home science	00	00	00	00	0	0	0	0	0	0
Bakery	01	00	18	18	0	02	02	00	20	20
Fruit Processing& Preservation	07	15	148	163	05	12	17	20	160	180
TOTAL	24	280	382	662	127	93	220	392	455	847

# Training of Farmers and Farm Women including sponsored training programmes (Off campus)

	No. of				N	lo. of Particip	ants			
Area of training	Courses		General			SC/ST			<b>Grand Total</b>	
	courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Horticulture										
Mushroom cultivation	02	25	48	73	5	12	17	30	60	90
Anthurium cultivation	01	4	16	20	1	4	5	5	20	25
Black pepper cultivation	03	90	50	140	20	17	37	110	67	177
INM in Hort. crops	02	52	24	76	8	4	12	60	28	88
Vegetable cultivation	03	32	20	52	8	5	13	40	25	65
Plant protection	00	00	00	00	0	0	0	0	0	0
Seed Treatment and their importance	01	16	10	26	4	2	6	20	12	32
Importance of Bio control agents in Plant disease management	02	108	30	138	32	13	45	140	43	183
IPDM in Paddy	12	230	115	345	50	25	75	280	140	420
Livestock	00	00	00	00	0	0	0	0	0	0
Scientific piggery farming	5	60	78	138	15	22	37	75	100	175
Fodder cultivation	01	8	10	18	2	5	7	10	15	25
Scientific Goatary Farming	04	15	70	85	05	23	28	40	93	133
Home science	00	00	00	00	0	0	0	0	0	0
Bakery	01	6	78	84	02	14	16	8	92	100
Value addition in Horticultural crops	05	8	164	174	02	20	22	10	184	194
Incoming generating activities for SHGs	01	2	30	32	0	8	8	2	38	40
TOTAL	43	656	743	1401	154	174	328	830	917	1747

#### **Training for Rural Youths including sponsored training programmes (on campus)**

A constitution	No. of				No	o. of Participa	ints			
Area of training	Courses	General			SC/ST			Grand Total		
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mushroom cultivation	1	10	2	12	2	1	3	12	3	15
Piggery	1	12	3	15	4	1	5	16	4	20
Value addition in Hort. crops	1	0	18	18	0	2	2	0	20	20
Nursery mgmt.	1	6	6	12	2	1	3	8	07	15
TOTAL	4	28	29	57	8	5	13	36	34	70

#### Training for Rural Youths including sponsored training programmes (off campus)

	No. of	No. of Participants										
Area of training	Courses	General			SC/ST			Grand Total				
		Male	Female	Total	Male	Female	Total	Male	Female	Total		
Oyster Mushroom Cultivation	1	8	1	9	2	1	3	6	2	8		
Scientific Pork Production	1	10	3	13	2	1	3	12	4	16		
Scientific Dairy Farming	1	7	1	8	3	1	4	10	2	12		
Scientific Goatary Farming	1	6	3	9	3	0	3	9	1	10		
TOTAL	4	31	8	39	10	3	13	37	9	46		

#### Training programmes for Extension Personnel including sponsored training programmes (on campus)

	No. of	No. of Participants								
Area of training	Courses	General			SC/ST			Grand Total		
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total
Recent advances in controlling FMD in animals	1	60	4	64	18	3	15	78	7	85
IPDM in Horticultural crops	2	52	22	74	8	8	16	60	30	90
Advances in Production Technology of Horticultural Technologies	1	20	5	225	4	1	5	24	6	30
Total	4	132	31	363	30	12	36	162	43	205

Training programmes for Extension Personnel including sponsored training programmes (off campus): Nil Sponsored training programmes – Nil

#### Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of	No. of Participants										
	Courses	General			SC/ST			Grand Total				
	Courses	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Value addition in Horticultural crops	1	10	12	22	3	3	6	13	15	28		
Mushroom cultivation	2	12	8	20	3	2	5	15	10	25		
Total	3	22	20	42	6	5	11	28	25	53		

#### **EXTENSION ACTIVITIES**

Nature of Extension	No. of	•			No	No. of Participants SC / ST			No. of extension personnel		
Programme	Programmes	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Field Days	05	110	48	158	17	8	25	4	8	12	
Krishi Uthsav/Mela	03	450	200	650	75	75	150	25	10	35	
Exhibition	04	168	147	215	18	07	25	18	07	25	
Film Show	6	26	12	38	8	2	10	20	8	28	
Method Demonstrations	8	16	8	24	8	6	14	3	1	4	
Group meetings	6	12	6	18	2	4	6	1	1	2	
Lectures delivered as RP	45	315	305	620	45	16	61	20	6	26	
Newspaper coverage	16	000	0	0	0	0	0	0	0	0	
Popular articles	06	0	0	0	0	0	0	0	0	0	
Extension Literature	04	0	0	0	0	0	0	0	0	0	
Advisory Services	435	235	148	383	10	8	18	22	12	34	
Scientific visit to farmers field	65	42	12	44	7	4	11	49	16	65	
Farmers visit to KVK	1115	655	335	990	40	10	50	60	15	75	
Diagnostic visits	8	4	2	6	1	1	2	05	3	08	
Soil health Campaigns	2	30	15	45	5	6	11	2	1	3	
Animal Health Camp	12	125	32	157	18	6	24	16	3	19	
Soil test campaigns	01	12	6	18	1	1	2	1	1	2	

Expert Farmer Media Interface	3	48	16	64	3	2	5	8	1	9
World veterinary day	1	0	0	0	3	1	4	28	6	39
Media meet	1	10	6	16	0	0	0	2	1	3
Seminar	1	45	12	57	2	1	3	8	1	9
Radio talks	6	0	0	0	0	0	0	0	0	0
TV programmes	2	0	0	0	0	0	0	0	0	0
Exposure visit	3	80	10	90	3	3	6	3	1	4
Kisan Mobile Adv. Services	12	650	138	788	0	0	0	8	6	14
Seed treatment campaign	8	365	95	450	18	6	24	12	6	18
Awareness programme(PMFBY)	1	260	130	390	15	6	21	28	12	40
World soil day/Rabi awareness prog.	1	45	25	70	6	3	9	6	2	8
Agricultural technology week	1	380	185	565	16	6	22	32	12	44
Total	1781	4083	1893	5856	321	182	503	381	140	526

# PRODUCTION OF SEED, PLANT AND LIVESTOCK MATERIALS

Production of seeds by the KVKs: Nil

# Production of planting materials by the KVKs

Crop category	Name of the crop	Variety	Hybrid	Number	Value (Rs.)	Number of farmers to whom provided
Plantation	Coffee	S -274		9000	92660	62
Tantation	Arecanut	Theerthalli	-	1500	22485	11
Spices	Black Pepper	-	Panniyur-1	8000	80306	45
		Napier	CO-3	10000	10000	10
Foddor	Fodder	Napier	Co-4	10000	10000	17
rouder	Fodder Fodder	Napier	NB-21	5000	5000	05
		Sampoorna	DHN-6	5000	5000	05

#### **Production of Bio-Products**

SI	Name of the	Details of production	А	mount
No	Bio fertilizer	Qty produced (Kg)	Cost of input ( Rs.)	Gross income ( Rs )
1	Arka Microbial Consortium	7417	250000	667530

#### **Production of livestock materials**

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	Number of farmers to whom provided
Goatary	Malabari/Sirohi	10	45,000	06
Piggery	Duroc CB/Yorkshire	62	186000	45

#### LITERATURE DEVELOPED/PUBLISHED

ltem	Title	Authors name	Number
Research Papers			00
	Soil Test Based fertilizer application in Coffee.	Prabhakar, B and Saju George	
Abstracts	Management of Foot rot disease in Black pepper.	Veeerendra Kumar, K.V., Saju George., B. T. Rayadu	03
Technical reports	Action Plan and Annual report (2016-17)	Dr. Saju George Veerendra kumar K.V. Prabhakara, B.	02

Technical bulletin	Calendar of operations for important horticultural crops of Kodagu (in Kannada).	Dr. Saju George Veerendra kumar K.V. Prabhakara, B.	500
Extension Folder	Pradhan Mantri Fasal Bheema Yojana- A Guideline	Dr. Saju George, Veerendrakumar, K.V. Prabhakara, B, Suresh, S.C. and Devaiah, K. A	
	Importance of vaccination in animals	Dr. Saju George , Dr. S. C. Suresh	1500
	Soil health management for sustainable agriculture	Saju George , Prabhakara, B.	
Extension Pomplet	Calendar of operations for Black Pepper.	Dr. Saju George Veerendrakumar K.V. Prabhakara, B.	1000
	Single node method of Black pepper nursery production technology. Krishi Mitra Kannada magazine	Veerendrakumar, K.V. Dr. Saju George, Prabhakara, B and Devaiah, K. A.,	
	Management of livestock during summer season	Suresh, S.C and Saju George	
Popular articles	Oyster Mushroom cultivation	Prabhakara, B, Veerendrakumar, K.V. Dr. Saju George	05
	Scientific Pig rearing	Suresh, S.C and Saju George	
	Role of Bio agents in Plant disease management	Veerendrakumar, K.V. Dr. Saju George, Prabhakara, B and Devaiah, K. A.,	

#### **DETAILS OF SAMPLES ANALYZED DURING THE 2016-17**

# Details of samples analyzed so far since establishment of SWTL:

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized (Rs.)
Soil Samples	6196	3133	486	156,276

# Details of samples analyzed during the 2016-17

Details	No. of Samples analyzed	No. of Farmers benefited	No. of Villages	Amount realized
Soil Samples	1213	713	92	1,60,750

#### **EXTERNALLY FUNDED PROJECTS UNDERTAKEN BY THE KVK**

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
NHM	2016-17	Dept. of Horticulture	Rs.15,00,000
NABARD	2016-17	NABARD	RS.5,00000

#### **KISAN MOBILE ADVISORY SERVICES**

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
April 2016	04	3670	69
May 2016	03	4320	23
June2016	07	5660	389
July 2016	04	5230	13
August 2016	03	3670	16
September 2016	05	3670	27
October 2016	03	1256	230
November 2016	02	1987	218
December 2016	03	2250	356
January 2017	03	2250	160
February 2017	02	2250	00
March 2017	02	3225	00
Total	41	39438	1501

#### PERFORMANCE OF INSTRUCTIONAL FARM

	Name of				Details	of producti	on	Am	ount
SI No	the crop	Date of sowing	Date of harvest	Area (ha)	Variety	Type of produce	Qty (Kg)	Cost of input ( Rs.)	Gross income ( Rs )
1	Coffee	1987 1994	Jan	1.6	R.S-274 C x R	Cherry	3500	135000	280000
2	Pepper	1993 1994	March April	2.0	Panniyur-1	Dry pepper	2850	145000	1355000
3	Sapota Banana	1993	Oct March	1.0	Cricket ball	Fruit	3000	78000	178882
4	Arecanut	1998	March April	0.4	Theerthalli Mohithnag ar	Matured nut	3865	55000	97000
5	Coconuts	1996	-	0.4	DxT	T. coconut	9880 no.	35000	72160
			Tota	ıl				448000	1983042

#### Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.,):

SI	Name of the	Details of production	Amount		
No	Bio fertilizer	Qty produced (Kg)	Cost of input ( Rs.)	Gross income ( Rs )	
1	Arka Microbial Consortium	7417	250000	667530	

#### Performance of instructional farm (livestock and fisheries production)

SI.	Name	Deta	etails of production		Am	Remarks		
No	of the animal / bird / aquatics	Breed	Type of Produce	Qty.	Cost of inputs	Gross income	Breed	
1	Goatary	Malabari	Goat kids	10	1	Goatary	Malabari	
2	Piggery	Duroc CB	Piglet	62	2	Piggery	Duroc CB	
	Total			72		Total		

#### **UTILIZATION OF HOSTEL FACILITIES**

Accommodation available (25)

Months	No. of trainees stayed	Trainee days (days stayed)
April 2016	12	03
May 2016	06	01
June2016	11	01
July 2016	00	00
August 2016	12	04
September 2016	16	02
October 2016	24	02
November 2016	00	00
December 2016	00	00
January 2017	15	02
February 2017	56	08
March 2017	25	04
Total	177	27

#### **FINANCIAL PERFORMANCE**

#### **Details of KVK Bank accounts**

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	SBI	Madikeri	000876	Principle Scientist & Head CHES, Chettalli	01000050017	571002060	SBIN0000876
With KVK	-	-	-	<del>-</del>	-	-	-

# Utilization of KVK funds during the year 2016-17 (Rs. In lakh)

S. No.	Particulars	Sanctioned RE	Expenditure
	Recurring contingencies		
1	Pay and Allowances	82.26	82.20
2	Travelling Allowances	1.50	1.26
		83.76	83.46
1	Cont	tingencies	
Α	Stationery	2.50	2.49
В	POL	1.72	1.68
С	Meals/Refreshment for trainees	0.75	0.74
D	Training material	0.50	0.49
E	Front Line Demonstration	2.26	2.25
F	On Farm Testing's	1.03	1.03
G	Building maintenance	0.80	0.79
	Library	0.10	0.08
	Training of Extension functionaries	0.25	0.25
Н	Extension activities	0.50	0.50
1	FPD innovative e activities	0.30	0.30
	Soil and water testing	1.36	1.36
	IFS	0.30	0.29
	Display boards	0.10	0.10
	TOTAL (A)	12.47	12.35
B. Non-Re	ecurring Contingencies		
Office automation		3.00	2.87
	Furniture and fixture	3.00	3.00
Repair and renovation		4.00	4.00
Vehicle 8.00		8.00	
	Total (B)	18.00	17.87
	Grand total (A+B)		113.68

# Status of revolving fund (Rs. In lakh) for the three years

Year	Expenditure	Income	Net balance
April 2016 – March 2017	Rs.13,38,960	Rs. 36,14,002	Rs. 62,32,738

# Details of HRD activities attended by KVK staff during 2016-17

Name of the staff	Designation	Title of the training programme	Institute where attended	Dates
Dr.Saju	Programme	Institute foundation celebrations	IIHR, Bengaluru	6 <sup>th</sup> September, 2016
George	Coordinator and Head	Horticultural Education: Present Status and Future Prospects	IIHR, Bengaluru	24 <sup>th</sup> September, 2016
Mr.Veerendra SMS (Plant Kumar Protection)		one day Master trainers training programme on Spices production and protection technologies	Appangala	22.02.2017
Prabhakara B	SMS (Hort.)	one day Master trainers training programme on Spices production and protection technologies	Appangala	22.02.2017
	SMS (Livestock)	Regional Workshop on Skill Development in Agriculture	NAARM, Hyderabad	20 <sup>th</sup> February, 2017
Suresh S.C		training programme on SREP	UAS, Bengaluru	08 -11 <sup>th</sup> Aug.2016
		training programme on Dairy Farm and Milk Processing plant Management	NDRI, Bengaluru	18 <sup>th</sup> to 24 <sup>th</sup> Sept, 2016.

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